AMENDMENTS TO THE DRAWINGS

The drawings have been amended. Figure 1 has been amended to include a power supply 45 connected to the battery and to show lithium ions 47 distributed in the electrolytic solution. A copy of the amended Figure 1 is included as an attachment to this response.

## REMARKS

In an Ex parte Quayle action issued November 23, 2005, the Examiner indicated that the 23 pending claims in the application are allowed, but that claims 1, 2, 14 and 23 are objected to. The Examiner also indicated that the drawings are also objected to.

In the drawing objection, the examiner indicated that the power source, the source of lithium must be shown or the features canceled from the claim(s).

Figure 1 has been amended to show the power source as required by the Examiner. The power source is discussed at paragraphs [0009] and [0022] which provides support for the addition. Reference to the power source in Figure 1 as power source 45 has been added to paragraph [0022]. Figure 1 is has also been amended to show the lithium. The lithium is shown as 47 in the electrolytic solution between anode 24 and cathode 26 impregnated in the porous separator material as taught in Paragraph [0018]. Paragraph [0018] has been amended accordingly to reflect lithium as 47. No new matter is added by these changes.

The Examiner indicated that the specification has not been checked to the extent necessary to determine the presence of all possible minor errors, and requested applicant's cooperation in correcting any errors of which applicant may become aware. The specification was carefully reviewed and revised accordingly. The most significant error was a math error in paragraph [0025], in which $2^x$ where x is 11, 12 and 13 was erroneously listed as 2024, 4048 and 8096 instead of 2048, 4096 and 8192, and again in paragraph [0026] where $2^{13}$ was listed as 8096. This is correction of an obvious error sanctioned by MPEP §2163.07 II.

Claims 1, 2, and 14 are objected to because of informalities. The Examiner states:

> Claims 1, 2, and 14 are objected to because of the following informalities: the recitations "predetermined voltage sufficiently high" and "(discharge) rate sufficient low" are indefinite since there is nothing in the specification, prosecution history, or the prior art to provide any indication as to what range of specific activity is covered by the term "sufficiently high" and "sufficiently low." Appropriate correction is required.

Applicant understands the Examiner's position and has revised the claims accordingly. Applicant does not agree that there is nothing in the specification to provide an indication as to what level of activity is required. Applicant understands that the claims must be sufficiently clear that one skilled in the art will understand the metes and bounds of the invention.

Accordingly, claims 1, 2 and 14 have been amended. The invention, indeed the claims, are directed to lithium batteries. Lithium batteries are known to experience an irreversible steady loss of capacity (or discharge) by a well-known mechanism as set forth in paragraph 7. This invention, however, is concerned with a second, reversible mechanism caused by segregation of lithium. The invention sets forth the mechanism that redistributes lithium to restore the battery capacity. As noted in paragraph [0024], not all families of lithium batteries exhibit the same discharge characteristics. The variables of voltage and time will depend on the specific design of a battery family. Therefore, these claims were first amended to indicate that the provided lithium battery is associated with a specific lithium battery family.

Next, a new step was added to determine the voltage profile of the lithium battery family. Each battery family will have a different profile. This voltage profile, set forth in Figure 3 for one lithium battery family, and described in paragraphs [0024] and [0025] describes the characteristic voltage in relation to a normal discharge voltage. The new step also sets forth the selecting a voltage below the normal discharge voltage, but above the characteristic voltage for the lithium battery family. These revisions accomplish the replacement of the term "predetermined voltage sufficiently high" in the claims. Even though this description was included in the specification, it is now included in the claims. Specific ranges are not claimed in these claims, nor are they required to be claimed, as the voltage profile for each lithium battery family will be different as noted. In fact, two different characteristic voltages for two different lithium battery families are provided as examples, which are also claimed in dependent claims. Multiple examples enables a broader claim scope. *See* MPEP §2164.02 What is required is that those skilled in the art fully understand what is claimed. Applicant respectfully submits that one skilled in this art would clearly understand voltage profiles, how to determine the voltage profile for a lithium battery family, how to determine the characteristic voltage and what a normal discharge voltage is. Thus, as amended, the claim, which prior to amendment may have been

somewhat ambiguous regarding "predetermined voltage sufficiently high", is now very clear as to how to select a voltage for the reconditioning process of the present invention.

The claims have also been amended to indicate that the rate is a discharge rate, the word "discharge" having to be added to the claim. Applicant submits that the term describing the discharge rate as "sufficiently low" is not indefinite since it must be read in conjunction with the rest of the claim element, which deals with mass transport, and specifically redistribution of the lithium ions in the negative electrode. As is known, the movement of the lithium ions can be influenced by a number of factors, but the discharge rate must provide for sufficient time to allow for this movement. When the element is viewed in its entirety, it is clear that the limitation is a functional limitation, which is permissible. Terms such as "sufficiently low" and "effective amount" are not necessarily indefinite, See MPEP §2173.05(c) III, and must be evaluated on the basis of whether or not one skilled in the art can determine value based on the disclosure. Here, applicant has taken the use one step beyond and made the term a functional term. In accordance with MPEP §2173.05, a functional limitation defines something by what it does rather that what it is. This certainly seems appropriate for a method claim. As further noted in MPEP§2173.05, a functional limitation must fairly convey to a person of ordinary skill in the pertinent art in the context in which it is used. A functional limitation is often used in association with an element, ingredient, or step of a process to define a particular capability or purpose that is served by the recited element, ingredient or step. Certainly, it is clear that one skilled in the art would know, or could readily determine, given the selected voltage (see above), the required rate to allow lithium migration (mass transport) in a lithium battery family for given conditions.

Claim 23 also has been amended to overcome the objection so that the preamble now makes sense, as requested by the Examiner.

## CONCLUSION

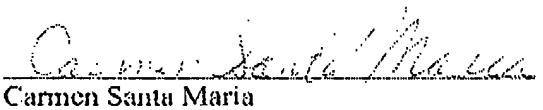
Applicant request entry of the above amendment and withdrawal of all objections. The claims have been amended to eliminate any informalities, and now uses clear and precise terms to define the invention whereby the metes and bounds of the invention can be ascertained by one skilled in the art. Drawing informalities have been corrected. The specification has been

amended to correct minor errors. Applicant requests allowance of the claims and that the application be advanced to issue.

The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to Deposit Account No. 50-1059.

Respectfully submitted,

Dated: December 16, 2005



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